

MULLION QUESTIONS:

MU1: (Q20:) If the installation requires a mullion, does the mullion have to be impacted?

A: Yes.

MU2: (Q113:) What does Dade County require for the approval of combination window "systems", (Mullions)?

A: Each of the windows to be used in the combination needs to first have Product Control Approval. Mullions, when pinned on either end, as required in the code, will need to have a component approval. The County will accept rational analysis on this mullion where a combination using said mullion would be requested for tested. This single PA202 structural portion only test, will verify the rational analysis submitted. The mulled unit shall not be tested before submittal for product approval of the mullion. This supersedes question 96 in this document.

MU3: (Q123:) How are different types of mullions (i.e. clipped mullions, un-clipped mullions and side-by-side installations) handled in Dade County?

A: The initial procedure is as outlined in question 113 of this document. The following will provide some clear definitions and procedures when applying for this type of approval.

Definitions:

Clipped Mullion(s) - *A member inserted between two window units which is supported at both ends by clips, brackets, pins, or any other direct mechanical fastening device.*

Un-Clipped Mullion(s) - *A member inserted between two window units which serves as reinforcement to the window jambs. This member is not directly attached at the ends to the supporting structure.*

Side-by side installation(s) - *Two units that are arranged in a side-by-side configuration and are simply fastened at the jambs to one another. No reinforcement is added at the jambs to create this type of window combination.*

Clipped Mullion(s):

-Clipped mullions will require having their own product approval. One cross sectional shape shall be applied to each submittal. i.e. Rectangular 1"x 2", 1"x 3", and 1"x 4" tubes may be qualified under one product approval submittal with a table or graph describing the properties of each. If steel is inserted in the mullion for strength, the steel shapes may be grouped. i.e. Different levels of I beams in a rectangular tube, or steel C channels. Each of these shapes shall require a separate product approval.

-Submittals shall be made based on rational analysis considering the E & I of the mullion only. The E & I of the adjacent window extrusions shall *not* be added to the calculations.

-Drawings showing the mullion with the cross section of each window to be used with this mullion are to be provided. i.e. 1" x 4" rectangular tube with extrusion "A" on either side, 1"x 4" rectangular tube with extrusion "B" on either side, etc.

-Calculations for the end supports of the clipped mullion shall be provided.

-Structural Load tests shall be used on the sample instructed to test for submittal verification.

Un-Clipped Mullions(s):

-Un-clipped mullions will require having their own product approval. Each of the jamb-unclipped mullion combination (i.e. 1" x 4" rectangular tube with extrusion "A", 1"x 4" rectangular tube with extrusion "B", etc.) shall require a separate product approval.

-Each different combination shall require a verification test to be determined by this office after submittal. The test shall include air, structural, and water test loads.

-Un-clipped mullions may be analyzed in combination with the E & I of the adjacent window jambs. The total E & I may be used for the calculations.

Side-by-side Installation(s):

-Side-by-side installations must be covered in the window product approval, and must be verified by the same tests of actual approval, or may be part of original submittal.

MU4: (Q128:)If a manufacturer does not want to go through the complete exercise of rationalizing the different load vs. spans for mullions, can an approval be issued based on a test of the largest span of the given mullion?

A: Yes, the mullion shall receive an approval that will only serve to approve the pressure tested. Extrapolation will not be allowed in this case, and the mullion will be allowed for uses in shorter spans than that which was tested provided the tested pressure for the given application is not exceeded. The submittal shall be made showing what will be used in the testing, and this office shall verify the proposed testing before conducting the actual tests. (Regular procedure for mullion submittals to this office.)